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A HISTORICAL VIEW OF THE SOLUTIONS OFFERED TO REGULATE CONCENTRATED ANIMAL
FEEDING OPERATIONS UNDER THE CLEAN WATER ACT: WHAT HAS BEEN LEARNED?

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I. Introduction

Livestock production systems and the Clean Water Act are linked by the broad terms used in that famous piece of legislation. In 1972, Congress passed the Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA),¹ for the purpose of “restor[ing] and maintain[ing] the chemical, physical, and biological integrity of the Nation's waters.”² CWA specifically prohibited the discharge of pollutants from any “point source.”³ A “point source” is defined in CWA as any discernable, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural storm water discharges and return flow from irrigated agriculture.⁴

Sources of pollution not defined as point sources under CWA were considered nonpoint source pollution. These sources were left to the states to regulate under sections 208 and 319 of CWA, which are discussed below. While Congress failed to specifically define nonpoint sources in CWA provisions, it did provide examples of agricultural nonpoint sources, which included “return flows from irrigated agriculture, runoff from manure disposal areas, and from land used for livestock and crop production.”⁵ In addition, large animal feeding operations that met the *72 statutory definition of a Concentrated Animal Feeding Operation (CAFO) were not considered point sources under the regulations if it could be established that an operation would not discharge pollutants except in the event of a 25 year, 24-hour storm event, or if it were a poultry operation that used dry manure management systems.⁶ Consequently, the prevailing opinion in the livestock industry, other than poultry, was that large-scale animal feeding operations were exempt from CAFO status and liability under CWA as long as its manure storage facilities were capable of holding their manure, process waste water, and the runoff from rainfall up to a 25 year, 24-hour storm (hereinafter “agricultural exception”).⁷ In effect, even if an operation were designated as a CAFO, through this exception, storm water runoff from field application of manure would be considered nonpoint source pollution; therefore, a farmer with such a feeding operation was not required to obtain a National Pollutant Discharge Elimination System (NPDES) permit to operate it in accordance with CWA standards.⁸ If a feeding operation does not fall within the agricultural exception, an operator of such was required to obtain such permit.⁹

Initially, the Environmental Protection Agency (EPA) faced the difficult decision of how to address the challenges given by Congress under CWA and other environmental legislation. The courts soon became involved when the EPA's decisions were challenged by groups who argued that the agency failed by not doing enough to fulfill its mission. Through involvement by federal courts of appeals, the assumption about the limited coverage of animal feeding operations under environmental statutes was seriously shaken.

In *Concerned Area Residents for the Environment v. Southview Farm*, the U.S. Court of Appeals for the Second Circuit held that runoff from liquid manure spread on the field of a New York dairy farm was point source pollution and not subject to the agricultural exemption; thus, the practice violated CWA.¹⁰ The court's interpretation of CWA's definition of "CAFO," "point source, and "agricultural storm water runoff" signaled a change in application of CWA to animal feeding operations.¹¹ The holding could have a significant economic impact on animal agriculture in the Northeast, especially dairy farms in the leading dairy producing states of Pennsylvania and New York. However, courts in subsequent cases have *73 added their own interpretations of key CWA provisions and their application to agriculture.

Congress twice amended CWA to address agricultural nonpoint source pollution. In 1977, Congress amended CWA to create the Rural Clean Water Program.¹² In 1987, Congress adopted Section 319,¹³ which required states precisely identify agricultural nonpoint sources, to select the best management practices that reduce pollution from these sources, and to emphasize implementation of best management practices in watersheds where agricultural nonpoint source is a significant problem.¹⁴ The 1987 amendment also added the specific "goal of restoring and maintaining the integrity of the nation's waters through nonpoint source control programs."¹⁵

By the mid 1990s, courts had ruled on key provisions of CWA as it applied to large scale production enterprises.¹⁶ After these decisions, the rules were revised.¹⁷ Again, the courts ruled on the proffered amendments and new rules were prepared and implemented.¹⁸ As recently as 2009, a new approach was fashioned that used Presidential Executive Order Authority to fashion another solution.¹⁹ This continual ruling and amending process begs the question: What have we learned from the history of these regulations as we seek to understand the future of regulating this key segment of the national agricultural economy?

This Article will trace the history of CWA's application to livestock production systems. The focus will be on explaining the federal statute, its regulations, and the key examples of litigation that has served to sharpen the meaning and application of CWA. Currently proffered solutions will be analyzed from perspectives gained in this review. As new initiatives are proposed, this reflective "look back" can aid in understanding what we have learned in the 35 plus years of regulating livestock production facilities under environmental water quality regulations.

***74 II. BACKGROUND**

Agriculture is of vital economic importance to most states. For example, the Pennsylvania agricultural industry generated \$6.12 billion dollars in cash receipts in 2008.²⁰ Animal agriculture comprises approximately three-fifths of this industry.²¹ In addition, this economy generated activity in areas such as food processing, marketing, transportation, and manufacturing of products and equipment used on farms.²²

Historically, farms in the Northeast and other parts of the country have been considered the typical "family farm," that is, farms with 40 to 150 animals that are owned and operated solely by a single family or by two or three members of a family in a partnership type arrangement.²³ Most of these farms have sufficient cropland to grow a large portion of the feed, especially forage crops, needed to feed their animals throughout the year. The manure produced from the animals is then applied to the cropland and provides valuable nutrients and organic matter to the soil. When properly done, this practice provides an effective and responsible means of disposing of animal wastes while reducing or eliminating the need for the purchase of commercial fertilizers.

During the last 30 years, livestock producers have faced difficult economic times. Faced with smaller profit margins, increased competitiveness within the industry, and more attractive off-farm wages, benefits, and working hours,²⁴ many farmers have been forced to make a choice: either expand the operation to take advantage of economies of scale and labor-saving technology or get out of the business entirely.²⁵ The result has been a dramatic decrease in the total number of herds and cows, but a corresponding increase in the number of cows per herd and the number of large herds.²⁶ Between 1982 and 2002, the number of large farms raising *75 dairy animals grew from 541 to 1,938.²⁷ Between 1999 and 2008 the number of dairy farms fell by approximately forty percent, but the number of dairy cows decreased by only 16 percent.²⁸ Between 1998 and 2007, total milk production in the United States grew by 18 percent to the level of 185 billion pounds in 2007 indicating a shift to a larger production scale and greater production per cow in the U.S. dairy industry.²⁹

One of the advantages of the shift to larger herd sizes is that large herd owners can take advantage of new technology that would be cost prohibitive to a small farmer. For example, virtually all large dairy operations today have facilities capable of storing several months' worth of manure, whereas many small, traditional farms still lack such facilities, since their cost per cow of maintaining these facilities is much higher. Manure storage facilities allow the farmer to apply manure to fields when conditions are most favorable, typically twice a year: once, in the fall after the crops have been harvested, and, second, in the spring just prior to planting. Generally, manure applied in the fall is incorporated into the soil by chisel plowing or some other method. Often a small-grain crop is planted at this time to reduce soil erosion and runoff during the winter months and to provide early spring forage or a summer grain crop. When the cover crop is harvested, whether in the spring or summer, manure is applied again, the ground is re-worked, and then planted. Liquid manure may also be applied to hay fields, which are harvested three or four times during each summer, after each cutting. The result is more nutrients and organic matter in the soil, decreased need for purchased fertilizer, and less nutrient runoff when compared to the traditional method of spreading manure daily.³⁰

III. The Clean Water Act As It Applies To Agriculture

CAFOs are the only type of agricultural activity considered point sources under CWA,³¹ and thus subject to the National Pollutant Discharge Elimination System (NPDES) permit requirements.³² To be considered a *76 CAFO, an operation must first meet the EPA's definition of an "animal feeding operation" (AFO): "a lot or facility where (i) [a]nimals . . . have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 monthly period, and (ii) [c]rops, vegetation forage growth or post harvest residues are not sustained in the normal growing season over any portion of the lot or facility."³³ This definition is construed broadly. The animals confined need not be the same animals or even the same species throughout the confinement period, nor do the 45 days need to be consecutive.³⁴

Animal feeding operations that meet one of three additional requirements may be designated by the EPA as a CAFO.³⁵ First, under the 1976 regulations, any AFO which confined more than 1,000 "animal units"³⁶ was considered a CAFO.³⁷ A dairy herd with 700 mature cows, 2,500 swine, 500 horses, 55,000 turkeys or 1,000 slaughter and feeder cattle would meet this requirement,³⁸ as would a dairy herd with 500 mature cows and 500 replacement young stock.³⁹ Second, an AFO which confined more than any of the animals listed in the regulation was a CAFO if it either discharged pollutants into the waters of the United States "through a man-made ditch, flushing system or other similar man-made device," or directly into such waters which "pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation."⁴⁰ Finally, any AFO, regardless of size, might be designated as a CAFO on a case-by-case basis if the EPA Director determines that it is a "significant contributor of pollution to the waters of the United States,"⁴¹ but only if the pollutants are discharged through a man-made device or directly into waters that

pass through the facility or come into contact with the confined animals.⁴² In making such a determination, the EPA Director must consider: (1) the amount of waste that reaches waters; (2) the means of the pollutants' conveyance; and (3) factors affecting the likelihood or frequency of discharge, such as slope, vegetation, and rainfall.⁴³

*77 However, the regulations provided an important exception to the CAFO determination: "no animal feeding operation is a concentrated animal feeding operation if [such animal feeding operation] discharges during a 25 year, 24-hour storm event," or was a poultry operation that used a dry manure management system.⁴⁴ Under this exception, an operation which would otherwise be considered a CAFO was not considered a point source, and, therefore, a farmer with this kind of feeding operation was not required to obtain a permit, as long as he/she could operate his/her storage facilities in such a way that it will contain all the waste generated plus rainfall up to the 25 year, 24-hour standard.

Farmers who obtained a NPDES permit, while subject to a "no discharge" effluent limitation, had a higher level of protection from liability over farmers with non-permitted CAFOs. Permitted operations were permitted to discharge during a "chronic or catastrophic"⁴⁵ rainfall event that might not rise to the 25 year, 24-hour level, but only if their storage facility was properly designed, constructed, and operated to contain all wastewater and runoff from storms up to the 25 year, 24-hour level.⁴⁶ Non-permit CAFOs must be shown to have such capacities based on the "best available technology economically achievable" standard.⁴⁷

Nonpoint source pollution was not subject to regulation under CWA.⁴⁸ Instead, Congress used CWA to delegate this responsibility to the states, emphasizing "state identification, assessment, and planning with respect to all sources of nonpoint sources."⁴⁹ While Congress decided to forgo a definition of nonpoint source pollution in CWA, Congress clearly manifested its intent that agricultural storm water runoff should fall into this category. The applicable provisions of CWA specifically identify "return flows from irrigated agriculture, runoff from manure disposal areas, and from land used for livestock and crop production" as nonpoint sources of pollution.⁵⁰

With the statutory and regulatory framework in place, the matter of clarifying intent and honing the interpretation of legislative and regulatory language was left to the courts. The following three cases interpreted CWA's language regarding its application to agriculture; first however, the *78 EPA's perception of its overall responsibility in these matters is articulated in *Natural Resources Defense Council v. Costle*.⁵¹

IV. Natural Resources Defense Council v. Costle

In *Costle*, the Natural Resources Defense Council (NRDC) challenged the EPA's authority to issue regulations in 1973 exempting certain classes of point sources from CWA's permit requirements.⁵² Under these regulations, the Administrator for the EPA exempted from CWA permit requirements "all silvicultural point sources; all confined animal feeding operations below a specified size; [and] all irrigation return flows from areas less than 3,000 contiguous acres or 3,000 noncontiguous acres that use the same drainage system."⁵³ The EPA Administrator took the position that such action was necessary to conserve the EPA's "enforcement resources for more significant point sources of pollution."⁵⁴ NRDC responded by seeking a declaratory judgment to the effect that the regulations were unlawful under CWA contending that the Administrator did not have the authority to exempt any class of point source from the permit requirements.⁵⁵ NRDC argued that Congress "intended to prohibit the discharge of pollutants from all point sources unless a permit had been issued to the discharger unless the point source was explicitly exempted from the permit requirements by statute."⁵⁶ The U.S. District Court for the District of Columbia agreed with the NRDC position and granted summary judgment in its favor.⁵⁷ The Administrator appealed to the U.S. Court of Appeals for the DC Circuit.⁵⁸

The circuit court described the issue as whether the Administrator's regulations could be upheld on what it described as a "doctrine of administrative infeasibility," meaning that "the regulations should be upheld as a deviation from the literal terms of [CWA] that [are] necessary to permit the A] to realize other principal objectives of the Act".⁵⁹ The Administrator argued that section 402 of CWA gave the Administrator discretion to refuse or grant permits and the authority to exempt classes of point sources from permit requirements entirely.⁶⁰ Without such authority, the Administrator contended unmanageable administrative burdens would be imposed on the EPA.⁶¹ In addition, the Administrator argued that *79 CWA's mandate that national effluent limitations be incorporated into individual permits was simply not possible with the type of point source discharges that the Administrator chose to exempt, such as wastewater generated by rainfall that drains over terrain into navigable waters and picks up pollutants along the way.⁶²

The circuit court disagreed with the Administrator and noted that the outcome the Administrator sought was not one that Congress intended.⁶³ Citing legislative history, the court noted that CWA included precise standards and definite guidelines on how the environment should be protected.⁶⁴ In CWA, Congress wanted a law that could be administered with certainty and precision, because that is what the American people expected of Congress.⁶⁵ The circuit court concluded that the statute, legislative history, and precedents made it clear that the Administrator lacked authority to exempt categories of point sources from the permit requirements of section 402 of CWA.⁶⁶ Courts, therefore, cannot manufacture an agency's power to revise a statute when such action is inconsistent with the clear intent of the statute.

Citing *NRDC v. Train*,⁶⁷ another case that involved the inter-relationship between effluent limitations and the CWA permit system, the circuit court noted that the statutory framework of CWA is not so tightly drawn so as to require guidelines for each class and category of point source.⁶⁸ In *Train*, the court appreciated the technological and administrative constraints that might prevent the Administrator from developing guidelines and numerical effluent limitations for certain point sources.⁶⁹ However, the court noted that the Administrator had the burden of demonstrating that the failure to develop guidelines and limitations were due to administrative or technological infeasibility.⁷⁰ The court reasoned that such infeasibility could be a reason to adjust court mandates to the minimum extent necessary to realize the general objectives of CWA, but it was another matter entirely to suggest that the problems afford the Administrator the authority to exempt certain categories of point sources from the permit program entirely.⁷¹ Over time, experience and technology developments might allow the Agency to address problems that seemed beyond its ability to manage. The court concluded by noting that administrative infeasibility may result in adjustments in the permit *80 programs, but it could not authorize the Administrator to exclude relevant point sources from the CWA permit program.⁷²

Congress has twice amended the CWA to emphasize the nonpoint source classification in response to the decision of the D.C. Circuit Court in *Costle*. In 1977, Congress amended the CWA's definition of point source to read: "[t]his term does not include return flows from irrigated agriculture."⁷³ Ten years later, in response to a push toward NPDES permit requirements for storm water discharges, Congress again amended the CWA so that the definition of point source now reads: "[t]his term does not include agricultural storm water discharges and return flows from irrigated agriculture."⁷⁴ Therefore, "given the dichotomy in the law between point sources and nonpoint sources, if, by definition, these agricultural return flows and storm water discharges are not point sources, then Congress must have intended them to be nonpoint sources."⁷⁵

A. Regulation of Agricultural Nonpoint Source Pollution

Agricultural nonpoint source pollution is recognized as an important contributor to water pollution in the United States.⁷⁶ Congress, however, excluded nonpoint sources from the CWA federal regulatory permit scheme.⁷⁷ Further, Congress chose to delegate this responsibility to the states.⁷⁸ It is not without significance that at the same time Congress was strengthening the nonpoint source provisions of CWA, its 1987 amendment also restricted its definition of “point source” by expressly excluding agricultural storm water runoff from this category.⁷⁹ It is clear from the foregoing that Congress intended the type of pollution that occurs from land application of livestock manure to be regulated under the nonpoint source provisions of CWA. If states have been slow to act, Congress, not the courts, can provide a remedy. Courts must not be allowed to circumvent the intent of CWA's regulatory scheme by broadening the definition of a point source in order to include a source that is specifically excluded by CWA. Such action would subject farmers to potential liability from citizens' suits, which are currently prohibited under CWA in instances of against nonpoint sources.⁸⁰

The agricultural nonpoint source provisions of section 319 of CWA have been given an opportunity to work. Since 1988, all states have gained ***81** approval for Assessment and Management Program Reports under section 319.⁸¹ Pursuant to state and federal incentive programs, farmers adopted conservation tillage, crop nutrient management plans, pest management plans and conservation buffers.⁸²

The next case, *Concerned Area Residents for the Environment v. Southview Farm*,⁸³ tested the notion that the statutory framework of CWA was vague and ambiguous; thereby leaving room to conclude that the framework should not apply to certain nonpoint sources and regulation could be avoided.

V. Concerned Area Residence For The Environment v. Southview Farm

The Southview Farm case is an example of a case that addressed the various challenges that application of this regulatory CAFO definition presented. Southview Farm was a large dairy farm in western New York, consisting of 1,100 acres of cropland and having 1,290 mature cows and 900 head of young stock in 1992.⁸⁴ Typical of many larger dairy farms, the cows were not pastured, but housed in a free stall barn and milked three times per day in an adjoining milking parlor.⁸⁵ Cows in this type system can freely walk throughout the barn between milkings, choose to eat at the feed bunk, drink water, or lie down in the individual stalls. Manure from the cows was deposited in the alleys behind the stalls, around the feed bunk, and flushed with water into large storage lagoons.⁸⁶ Southview used a solids separator which removed the solids from the flush water, allowing some of the water to be recycled to flush down the alleys in the barns.⁸⁷ Eventually, this liquid was applied to the fields using a center pivot irrigation system and a hard hose traveler.⁸⁸ Separated solids were transported by conventional manure spreaders to fields farthest from the dairy.⁸⁹ Liquid manure that did not undergo the separation process is applied to the fields using truck mounted and tractor pulled liquid tank spreaders.⁹⁰

In January of 1991, a group of neighboring residents calling themselves Concerned Area Residents for the Environment (CARE) brought a citizens' suit under the CWA in the U.S. District Court for the ***82** Western District of New York.⁹¹ The plaintiffs alleged that Southview's spreading of liquid manure on a field on several occasions had caused discharges of pollutants into waters that eventually led to the Genesee River.⁹² The plaintiffs also brought state law claims for nuisance, negligence, and trespass.⁹³ Damages sought in all claims totaled over \$4 million.⁹⁴ The plaintiffs' claims were based upon testimony of “heavy” manure application to a field on certain dates and on testimony and photographs of runoff during heavy rains.⁹⁵ The plaintiffs claimed these were discharges from a point source, since they flowed through ditches and a drainage pipe on the property and eventually to streams off the property.⁹⁶

After a three week trial in April of 1993, the jury returned a verdict in favor of the plaintiffs on five of the eleven CWA violations submitted to the jury.⁹⁷ The jury also awarded the plaintiffs \$4,101 on the trespass count for contamination of water wells.⁹⁸ The trial court subsequently granted Southview's motion for summary judgment as a matter of law on these five CWA violations.⁹⁹ The court ruled that no evidence existed from which a jury could have reasonably found that a discharge had even occurred on two of the occasions.¹⁰⁰ According to the court, two other discharges were the result of heavy rainfall and were exempted as agricultural storm water runoff.¹⁰¹ The fifth occasion was ruled to be the natural result of the liquid flowing to the lowest spot in the field after being dispersed over the field, and reached the stream in "too diffuse a manner to create a point source discharge."¹⁰² The trial court also ruled that Southview did not meet the CWA definition of a CAFO because crops were sustained over much of the farm,¹⁰³ and that the manure spreaders were not point sources under CWA standards.¹⁰⁴

On appeal, the U.S. Court of Appeals for the Second Circuit reversed the trial court's judgment and re-instated the jury's verdict on all five of the CWA violations.¹⁰⁵ In regard to the scope of the CAFO designation, the court held that "liquid manure spreading operations are a *83 point source because the farm itself falls within the definition of concentrated animal feeding operation ("CAFO") and is not subject to the agricultural exemption."¹⁰⁶ In order to find that the farm fell within the CAFO definition, the court first had to exclude the farm's 1,100 acres of cropland to satisfy the requirement. The court adopted the view that "the vegetation criterion pertains only to the lot or facility in which the animals are confined."¹⁰⁷ Since the cows were confined inside the barns and no crops were grown inside the barns, the court concluded that the farm met the CWA's definition of CAFO.¹⁰⁸ This view is consistent with the EPA's interpretation of the regulations.¹⁰⁹

However, since no discharge had occurred from the actual facilities where the cows were confined, the court then had to include the cropland and find that the entire farm was a CAFO to conclude that a discharge had occurred from a point source.¹¹⁰ This result appears to be in direct conflict with the express intent of Congress and the EPA, the EPA's CAFO Guidance Manual limits, and the CAFO designation of the actual confinement facility and its manure retention facilities.¹¹¹ Furthermore, EPA's regulations expressly exclude "[a]ny introduction of pollutants from non point-source agricultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands, but not discharges from concentrated animal feeding operations" from the NPDES permit requirement.¹¹² By ignoring the plain language of these sections of the regulations, the court was able to find that the entire acreage of the farm was part of the "lot or facility" where the animals were kept and, therefore, not subject to the agricultural storm water exemption.¹¹³

The court's circular reasoning left little incentive for a large animal feeding operation to obtain a NPDES permit. Under the applicable CAFO exception, no animal feeding operation is considered a CAFO if it discharges only in the event of a 25 year, 24-hour storm.¹¹⁴ Therefore, despite the fact that Southview met the size requirement under the regulations, it was not considered a CAFO subject to the NPDES permit requirements if it could meet this exception. On the other hand, even a permitted facility is not allowed to discharge except in the event of a 25 year, 24-hour event, or a chronic or catastrophic storm, neither of which occurred in this case. Accordingly, following the Second Circuit's *84 reasoning, Southview would have violated CWA even if it had obtained a permit, since its fields were considered a point source as part of the CAFO and were not subject to the agricultural storm water exemption.

The practical effect of this decision is that once a farm is designated a CAFO, it could be considered strictly liable for any discharge, from any of its fields, during any rainfall that does not rise to the 25 year, 24 hour, or "chronic or catastrophic" storm level, regardless of the rate or time of manure application.

A. Additional Point Source Designations

Besides the Southview Farm court's designation of the farm as a point source because of its CAFO status, the court also found two additional ways of characterizing the discharges as from point sources. First, the court found that "the swale coupled with the pipe under the stonewall leading into the ditch that leads into the stream was in and of itself a point source;"¹¹⁵ and, second, "the manure spreading vehicles themselves were point sources" under case law.¹¹⁶ This raises the question of whether the CAFO designation was even necessary to the outcome of the case. Construed narrowly, these statements could simply mean that these two sources in and of themselves were independent of the farm's CAFO status. Nevertheless, the court relied upon words used in the statutory definition of point sources such as "pipe," "ditch," "channel," and "container" or "rolling stock"¹¹⁷ to find that the swales, ditches, and pipes, as well as the manure spreaders, fit the statutory definition.

The court also noted that the spreaders fit the statutory definition of a point source. The court made the determination, using case law, that the spreaders were point sources, as discharges that were "collected by human effort" and "channelized through the ditch or depression in the swale."¹¹⁸ The court expressly stated that "the definition of a point source is to be broadly interpreted."¹¹⁹ It appears from this analysis that this court would have found the discharges to be from a point source whether or not the manure that was spread had come from a facility that was designated as a CAFO.

A troubling aspect of the court's decision, which could have a significant impact, is that there are thousands of farms in the U.S. that do not meet the 1,000 animal unit definition of a CAFO, but have nevertheless installed manure holding facilities and implemented soil conservation practices such as grass waterways and swales and diversion ditches and *85 terraces. These man-made devices are designed specifically to collect and channel storm-water to reduce storm-water runoff and prevent soil erosion. Diversion ditches and terraces are constructed along the contour lines of sloping fields and are usually drained by means of a connecting waterway, swale, or underground piping system which carries the water to a natural watercourse. The troughs, sides, and ridges of terraces are farmed in the same manner as the rest of the field, including the application of manure.¹²⁰

Under the Second Circuit's finding that collecting, channeling, and piping runoff was in and of itself a point source, such man-made conservation devices could subject even a small farm to liability, following the court's reasoning. Such a result would not only be contrary to the intent of Congress in passing CWA, but would also discourage the implementation of sound conservation practices that have been encouraged for many years.

B. The Specified Violations Charged

Another cause for concern is the second circuit's willingness to allow a jury to find CWA violations without any direct evidence that a discharge even occurred. As for two of the claims against Southview Farm, those on July 12, 1989 and August 22, 1989, the witnesses testified that they did not observe any manure running off the fields; they only saw manure being spread on those days.¹²¹ The jury's finding that discharges had occurred on those days was apparently based on testimony that manure was also spread in the same area on July 13, 1989, when a discharge was observed.¹²² The district court judge, however, found a "complete absence of substantial evidence supporting the verdict," and set aside the jury's finding of the discharge on those dates, describing it as "sheer surmise and conjecture."¹²³ The Second Circuit reversed the district court, believing that the jury could have inferred that the manure spreading observed on July 13 which led to a discharge, probably had the same result on July 12 and August 22.¹²⁴ While the court refused to make the manure spreading "a per se violation of the Clean Water Act,"¹²⁵ it apparently was willing to allow a jury to do so.

Two other discharges occurred during heavy rains on September 26, 1990 and April 15, 1991.¹²⁶ The issue regarding these two discharges *86 was whether or not the agricultural storm-water exemption applies to excuse the alleged violations.¹²⁷ The district court set aside the jury's verdict on the basis that "no reasonable juror could find that these discharges were not excepted under the CWA as agricultural storm water discharges."¹²⁸ The Second Circuit reversed, ruling that "there can be no escape from liability for agricultural pollution simply because it occurs on rainy days."¹²⁹ The Second Circuit framed the issue as not "whether the discharges occurred during rainfall, . . . but rather, whether the discharges were the result of precipitation."¹³⁰ The court determined that the jury had a reasonable basis to find that the discharges on those dates were not the result of rainfall.¹³¹

While the court was correct in framing the issue as it did, this is a difficult determination for a lay jury to make. For example, without expert testimony, a jury would not normally know that the rate applied in this case of 5,000 gallons of liquid-per-acre is equivalent to eighteen hundredths (0.18) of an inch of rainfall,¹³² or that a moderately textured soil with 10% slope is capable of absorbing this at a 20% rate of application per hour.¹³³ Soil absorption rate depends on many factors, including soil type and texture, moisture content, slope, and the amount of cover.¹³⁴

CWA clearly recognizes that runoff will occur from "[m]anure disposal areas, and from land used for livestock and crop production,"¹³⁵ as was the case in Southview. Yet CWA specifically identifies this runoff as nonpoint source pollution, for which CWA provisions delegate enforcement responsibility to the states.¹³⁶ The proper inquiry is whether the manure would have run off the property but for the heavy rainfall that occurred. In this regard, the district court admitted two reports prepared by the New York Department of Environmental Conservation in response to these complaints.¹³⁷ The first, in reference to the September 26, 1990 discharge, stated that "[d]ue to heavy rain, runoff from fields caused manure to run into road ditch."¹³⁸ The second, following an investigation of a complaint on April 15, 1991, stated that "[h]eavy rain caused manure to run off into streams. . . ."¹³⁹ Despite reliable evidence from the Department of *87 Environmental Conservation officials that the runoff was caused by the heavy rainfall, the jury still found a violation.¹⁴⁰ It may be true that liability should not be precluded because a discharge happens on a rainy day, but it is equally true that a jury should not be able to impose liability when a discharge occurs during rainfall, without being required to make a determination based on sound scientific and agronomic data, that the discharge would have occurred even in the absence of rain.¹⁴¹

In discussing the July 13, 1989 discharge, the district court properly recognized that "[t]here may be situations where the causal connection is so immediate that the spreading mechanism could be deemed to be a point source, as, for example, where the pollutant is poured into a dike at the edge of the river."¹⁴² However, in setting aside the jury's verdict on this claim the district court determined that the connection between the spreaders and the discharge was "too far-removed" to be considered a point source.¹⁴³ The second circuit, in reversing the district court, apparently considered the tank spreaders as point sources per se.¹⁴⁴ Simple testimony of "heavy" manure application from witnesses with no background in these matters should not be sufficient to make this determination. The outcome in Southview Farm may have been the same even under this type of analysis. However, by ruling as it did, the Second Circuit opened the door to findings of a CWA violation simply by tracing an alleged discharge back to the manure spreading equipment, no matter how remote the connection.

Many Congressmen apparently agreed that the Second Circuit's decision in Southview Farm was contrary to the intent and scope of CWA, and as a result, House Bill 961 was introduced in 1995.¹⁴⁵ This bill would have statutorily overturned the Southview Farm decision by adding language to section 319 that read "any land application of agricultural inputs, including livestock manure, shall not be considered a point source and shall be subject to enforcement only as a nonpoint

source.”¹⁴⁶ The bill was passed by the House of Representatives, but the Senate failed to take action,¹⁴⁷ and for the time being; Southview Farm remains valid precedent.

***88 VI. The Unified Strategy To Minimize Water Quality And Public Health Impacts Of Animal Feeding Operations, 1998-2000¹⁴⁸**

As a result of domestic and export market forces, technological changes, and industry adaptations, substantial changes have continued in the animal production industry. “Despite USDA support for sustainable agricultural practices, these factors promoted expansion of confined animal production units with growth in both existing areas and new areas; integration and concentration of some of the industries; geographical separation of animal production and feed production operations; and the concentration of large quantities of manure and wastewater on farms and in some watersheds.”¹⁴⁹

In February 1998, President Clinton released a Clean Water Action Plan which set out a strategy to restore and protect the water quality across the United States.¹⁵⁰ The Action Plan “identif[ied] polluted runoff as the most important remaining source of water pollution and provide[d] for a coordinated effort to reduce polluted runoff from a variety of sources.”¹⁵¹ To achieve its purposes, the Action Plan encouraged the USDA and the EPA to develop a Unified Strategy which would “minimize the water quality and public health impacts of animal feeding operations.”¹⁵²

The Unified Strategy discussed the relationships between AFOs, the environment, and public health.¹⁵³ Further, it “is based on a national performance expectation for all AFO owners and operators.”¹⁵⁴ The Strategy also “presents a series of actions to minimize public health impacts and improve water quality while complementing the long-term sustainability of livestock production.”¹⁵⁵ The perception was that many CAFO operators were avoiding responsibility to obtain permits, and the objective was to remedy that situation.¹⁵⁶ The expectation was that “all AFO owners and operators [would] develop and implement technically sound and economically feasible site-specific Comprehensive Nutrient *89 Management plans (CNMPs)” for their operation.¹⁵⁷ For the vast majority of AFOs, these rules were to be voluntary and implemented through locally led conservation, environmental education, and financial and technical assistance programs.¹⁵⁸ AFOs that were subject to the requirement to have an NPDES permit would be required to develop a CNMP and meet other conditions to ensure CWA compliance.¹⁵⁹ These permits would “also ensure that animal manure from CAFOs would be utilized properly” and implemented according to CNMP provisions.¹⁶⁰

VII. Revisiting the Clean Water Act CAFO Regulations, 2000-2003

In 2001, following a series of reviews of CWA as it applied to livestock production facilities, the EPA proposed changes to its regulatory definition of a CAFO for the first time in more than 20 years.¹⁶¹ Following analysis of the comments received to the proposed rule, the EPA announced the rules were promulgated as final rules in February of 2003.¹⁶² The final rule revised and clarified the EPA's regulatory requirements for CAFOs under CWA to ensure that CAFOs take appropriate actions to manage manure effectively in order to protect the nation's water quality.¹⁶³

The rule established “a mandatory duty for all CAFOs to apply for an NPDES permit and to develop and implement a nutrient management plan.”¹⁶⁴ The effluent guidelines further created “performance expectations for existing and new sources to ensure appropriate storage of manure, as well as expectations for proper land application practices at the CAFO.”¹⁶⁵ This new “required nutrient management plan would identify the site-specific actions to be taken by the CAFO to ensure proper and effective manure and wastewater management, including compliance with the Effluent

Limitation Guidelines.”¹⁶⁶ “Both sections of the rule also contained new regulatory requirements for dry-litter chicken operations,” which had previously been excluded from the CAFO definition.¹⁶⁷

***90** In the EPA's view, despite more than 25 years of regulation of CAFOs, reports of discharge and runoff of manure and manure nutrients from these livestock operations persisted.¹⁶⁸ Although these conditions are in part due to inadequate compliance with and enforcement of existing regulations, the EPA believed that the regulations themselves also needed revision.¹⁶⁹ The final regulations would “reduce discharges that impair water quality by strengthening the permitting requirements and performance standards for CAFOs.”¹⁷⁰ These changes were “expected to mitigate future water quality impairment and the associated human health and ecological risks by reducing pollutant discharges from facilities that confine a large number of animals in a single location.”¹⁷¹ The final regulation reads in part:

[The] EPA's revisions to the existing regulations also address[ed] the changes that occurred in the animal production industries in the United States since the development of the existing regulations. The continued trend toward fewer but larger operations, coupled with greater emphasis on more intensive production methods and specialization, is concentrating more manure nutrients and other animal waste constituents within some geographic areas

Furthermore, there is limited land acreage near the CAFO to effectively use the manure. This trend has coincided with increased reports of large-scale discharges from CAFOs, as well as continued runoff that is contributing to the significant increase in nutrients and resulting impairment of many U.S. water bodies.¹⁷²

This 2003 final rule maintained many of the basic features and the overall structure of the 1976 NPDES regulations with some important exceptions.¹⁷³ First, “all CAFOs have a mandatory duty to apply for an NPDES permit,” even if it discharges only in the event of a large storm.¹⁷⁴ This removes the ambiguity of whether a facility needs an NPDES permit should an operation only discharge in the event of rainfall. In the event that a large CAFO has no potential to discharge, the 2003 rule provided a ***91** process for the CAFO to make such a demonstration in lieu of obtaining a permit.¹⁷⁵ Therefore, “the second significant change is that large poultry operations are covered, regardless of the type of waste disposal system used or whether the litter is managed in wet or dry form.”¹⁷⁶ Finally, “under this final rule, all CAFOs covered by an NPDES permit are required to develop and implement a nutrient management plan.”¹⁷⁷ This type of plan “would identify practices necessary to implement the ELG [effluent limitation guidelines] and any other requirements in the permit and would include requirements to apply manure, litter, and process wastewater consistent with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients.”¹⁷⁸

The next step in the litigation and its impact on these regulations came shortly thereafter in the form of a direct assault on the statute and its terms, some of which had been in place for 30 years.

VIII. *Waterkeeper v. EPA*

In *Waterkeeper v. EPA*,¹⁷⁹ environmental groups (the environmental plaintiffs) joined forces with agricultural groups (the agricultural plaintiffs) to challenge the 2003 action designed to tighten CWA's CAFO requirements.¹⁸⁰ The parties shared a common interest in seeking court review of a proposed rule that they believed included serious deficiencies.¹⁸¹ The *Waterkeeper* court summarized the challenges brought by the appealing parties as falling into three categories: “1) challenges to the permitting scheme established by the rule; 2) challenges to the types of discharges that were subject to regulation under the CAFO rule; and 3) challenges to the effluent limitation guidelines that are established by the CAFO rule.”¹⁸²

In regard to the first challenge, the environmental petitioners argued that the CAFO rule allowed permits to be issued to large CAFOs without any meaningful review of the comprehensive nutrient management plans that the revised rule would require.¹⁸³ In addition, the parties argued that failing to require the nutrient management plan to be included in the *92 CWA permit was likewise a violation.¹⁸⁴ The farm plaintiffs charged that the EPA exceeded its authority by requiring all CAFOs to apply for a CWA permit or otherwise demonstrate that CAFO had no potential to discharge.¹⁸⁵ Their basic point was that the prevention of pollution was considered to be insufficient to trigger CWA coverage for regulatory purposes.

In various sections, CWA states that its terms regulate the discharge of pollutants into waters of the United States.¹⁸⁶ Permits granted by the EPA give the permit holder authority to conduct an activity that discharges a pollutant as a by-product.¹⁸⁷ Farm petitioners challenged the proposed rule on grounds that the EPA exceeded its jurisdiction by requiring all CAFOs to apply for a CWA permit or otherwise demonstrate that they have no potential to discharge a pollutant.¹⁸⁸ In the court's view, "unless there is a 'discharge of a pollutant' there is no violation of the Act, and point sources are, accordingly, neither statutorily obligated to comply with EPA regulations for point source discharges, nor are they statutorily obligated to seek or obtain a CWA permit."¹⁸⁹ In short, imposing obligations on all CAFOs, regardless of whether they have in fact added any pollutants to the navigable waters, violates the CWA's statutory scheme. As stated above, an administrative agency's authority is limited by the authority granted to it by Congress. Even if well meaning, an agency cannot act beyond the terms of the law under which it operates.

In regard to the second challenge, the court noted that the CAFO rule generally requires that discharges from a land application area under the control of a CAFO are subject to CWA requirements.¹⁹⁰ However, agricultural storm water discharges are considered to be an exception to that requirement.¹⁹¹ In addressing this issue, the proposed CAFO rule classified agricultural storm water as "any 'precipitation-related discharge of manure, litter, or process wastewater from land areas under the control of a CAFO' where the 'manure, litter, or process wastewater has [otherwise] been applied in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization.'" ¹⁹² The environmental plaintiffs believed this treatment violated CWA in that all CAFO discharges are required to be regulated, which may be a sound decision under the Southview decision.¹⁹³ In regard to discharges from land areas, the farm *93 plaintiffs argued that the CAFO rule violated CWA since it would regulate discharges without requiring the discharges to be collected or channeled as would ordinarily be part of the point source definition.¹⁹⁴

In regard to the third challenge, the environmental petitioners argued that the rule did not go far enough to establish technology based effluent limitation guidelines and failed to promulgate additional water quality based effluent limits such as those found in total maximum daily load determinations (TMDL) for impaired stream segments.¹⁹⁵

IX. EPA's 2006 response to Waterkeeper

Following the Waterkeeper decision, the EPA responded in June 2006 with proposed revisions to the CAFO as the earlier revisions were vacated and remanded by the Second Circuit's decision.¹⁹⁶ To address the court's decision on the duty to apply for a permit, the EPA proposed changes to the 2003 CAFO rule in two areas: "revising the requirement that all CAFOs apply for an NPDES permit and eliminating the procedures for a no potential to discharge determination."¹⁹⁷ In addition, the EPA sought to clarify how unpermitted CAFOs may meet the agricultural storm water exemption when they land apply manure, litter, or process wastewater. The following excerpt from the proposed rule published in the Federal Register addresses key points of the proposal:

Today's proposed rule would replace the "duty to apply" requirement of the 2003 rule with a requirement that all CAFOs that "discharge or propose to discharge" must seek coverage under an NPDES permit. This proposed change would address the Waterkeeper court's ruling and would hold CAFO owners and operators to the same "duty to apply" requirement as already exists for point sources under 40 CFR 122.21(a)(1).

The result of this proposed revision is that only owners and operators of those CAFOs that discharge or propose to discharge would be required to seek coverage under an NPDES permit. This revised duty to apply applies to all owners and operators that discharge or propose to discharge, regardless of the volume or duration of the discharge except for discharges of agricultural storm water *94 (see below). A facility may seek permit coverage in one of two ways, by submitting an application for an individual permit or by submitting a notice of intent to be covered by a general permit that has been issued by the permitting authority. Generally, under this proposal, it would be the CAFO's responsibility to decide whether or not to seek permit coverage based on whether they discharge or propose to discharge. This is how the NPDES program operates for other point sources. Any CAFO that discharged or proposed to discharge and failed to obtain an NPDES permit would be in violation of the NPDES regulatory requirement to seek coverage under an NPDES permit. A facility with an actual discharge would also be in violation of the CWA prohibition against discharging without an NPDES permit (33 U.S.C. 1311(a)).

Any discharge from a CAFO, even one that is unplanned or accidental, is illegal unless it is authorized by the terms of a permit. Many CAFOs have conditions that may result in a discharge. For example, manure structures that are improperly designed or, for other reasons, have insufficient capacity (e.g., due to facility expansion) may discharge. In addition, discharges can occur from a properly designed containment structure that is improperly operated and maintained or as a result of precipitation that exceeds the operating capacity of the structure. In the absence of an actual discharge or proposed discharge, CAFOs with such conditions are not required under the terms of today's proposed rule to obtain an NPDES permit. However, the owner or operator of a CAFO that fails to obtain an NPDES permit and has a discharge is subject to State or federal enforcement, as well as liability from citizen suits under CWA Section 505(a).

Because discharges are prohibited from unpermitted CAFOs, NPDES permit coverage reduces CAFO operator risk and provides certainty to CAFO operators regarding activities and actions that are necessary to comply with the Clean Water Act. Compliance with the permit is deemed compliance with the CWA and thus acts as a shield against EPA enforcement or citizen suits under CWA Section 402(k). Furthermore, under the 2003 rule, most CAFO NPDES permits will incorporate ELG (effluent limitation guidelines) provisions that allow for discharge when precipitation causes an overflow from a structure that is *95 properly designed, constructed, operated, and maintained, in accordance with the applicable design standards. Finally, upset provisions can protect permittees from legal liability when emergencies or natural disasters cause discharges beyond the permittee's reasonable control, as provided in Sec. 122.41(n).

This protection is not available to unpermitted CAFOs. There are many factors a CAFO owner or operator should consider in determining whether to seek permit coverage. For example, if the CAFO is in a flood plain, subject to high annual precipitation, or subject to lengthy rainy seasons, it is likely to have a discharge if the CAFO drains to a water of the United States. Other factors likely to result in a discharge include runoff from open feed bunkers, field storage, or other stockpiles exposed to precipitation; lagoons that are not sufficiently pumped down for the upcoming winter season; holding of process wastewater for summer irrigation that precludes adequate capacity for chronic rainfalls; and inadequate containment due to unavailability of land for manure, litter, or process wastewater application due to timing constraints associated with, for example, saturated ground or imminent rain. In addition, a discharge may occur from land application due to improper

maintenance or operation of manure handling equipment that may lead to spills, and application of manure, litter or process wastewater to land in such a way that it does not qualify for the agricultural storm water exemption.¹⁹⁸

X. 2008 Proposals

In a March 2008 Supplemental Notice of Proposed Rule Making (SNPRM), the EPA proposed “a voluntary option for CAFOs to certify that the CAFO does not discharge or propose to discharge based on an objective assessment of the CAFO's design, construction, operation, and maintenance.”¹⁹⁹ The EPA developed this option that would allow a CAFO, once determined that it does not need to seek permit coverage, to certify to the Director that the operation does not discharge or propose to *96 discharge pollutants. The proposal would establish clear criteria that a CAFO must meet in order to be eligible for the certification.²⁰⁰

Therefore, the proposed certification option would not change the duty to apply the requirement proposed in 2006 which required CAFOs that discharged or proposed to discharge to seek permit coverage. It would, however, provide a structured process for CAFOs that wish to certify to establish that they do not discharge or propose to discharge. The “EPA believe[d] that such a structured process would be helpful to CAFOs as they determine whether or not to seek permit coverage.”²⁰¹ “Furthermore, a CAFO with a valid no discharge certification would not be subject to liability for violation of the duty to apply at 122.23(d) in the unlikely event that a discharge should occur, though it would still be liable for violation of the prohibition on unpermitted discharges in CWA section 301.”²⁰² The EPA emphasized that “submission of a no discharge certification is voluntary.”²⁰³ “[o]nly CAFOs that discharge or propose to discharge would be subject to NPDES permit requirements, whether or not they submit a certification.”²⁰⁴

In summary, the 2006 and 2008 responses to the Waterkeeper decision, the EPA recognized the impact of the decision on the duty of a CAFO to apply for an NPDES permit. In so doing, the EPA established a process for making the determination complete with criteria that could be applied to determine whether a facility could make the certification. Having the benefit of EPA guidance also assists producer decision-making in this area.²⁰⁵

XI. Presidential Executive Order 13508

On May 12, 2009, President Obama issued an Executive Order in which he took measures “to protect and restore the health, heritage, natural resources, and social and economic value” of the Chesapeake Bay, “the nation's largest estuarine ecosystem.”²⁰⁶ Among the many issues this Executive Order addressed was one with direct application to agricultural producers in the Bay watershed.²⁰⁷ In section 201 of the Order, the *97 President directed the Federal Leadership Committee to “manage the development of strategies and program plans for the watershed and ecosystem[s] of the Chesapeake Bay and oversee their implementation.”²⁰⁸ The Committee was tasked with defining the next generation of tools and actions needed to restore water quality in the Bay and to the regulations, programs, and policies needed to implement these actions.²⁰⁹

On November 24, 2009, the EPA issued a revised report to fulfill the responsibility described above.²¹⁰ The report noted that agricultural use is the largest intensive land use category in the watershed, and also a significant contributor to nutrient and sediment pollution in the Bay.²¹¹ The report noted several steps the agency could take in addressing what EPA could do in the Bay watershed.²¹² The first step would be to consider revising provisions designed to classify AFOs as CAFOs under current CWA regulations.²¹³ A second part of this recommendation would take on a regulatory

revision to the CAFO definition by lowering the number of animals needed to attain status as a medium or large CAFO or modifying current regulations that identify specific practices that would result in an AFO being classified as a CAFO, such as “discharges . . . to an impaired water, discharges into waters of the United States through a man-made devise, or discharges directly into waters of the United States that pass through the facility on which the producer operates.”²¹⁴

A third recommendation suggested that the EPA strengthen CAFO permits by adopting a “next generation” nutrient management plans that would further prescribe those agricultural practices which are viewed as necessary for load reductions, such as off site transfer of manures generated by the CAFO and general increased producer accountability for farm operations.²¹⁵

A fourth recommendation directs the EPA to take action to conduct rigorous review of each state's technical standards for CAFOs and work with states to update state standards.²¹⁶ This recommendation also called on states to collect information about CAFOs by conducting comprehensive surveys to develop the information the EPA needs to develop its regulatory programs that it currently lacks.²¹⁷

***98** On January 11, 2010, the EPA announced the initiation of a new federal rule-making designed to address a variety of recommendations flowing from the reports issued in response to the Executive Order.²¹⁸ In regard to CAFOs, the EPA announced it will propose regulations that will result in pollutant reductions that are needed to achieve the objectives of the Bay-wide TMDL that is to be proposed later in 2010.²¹⁹ This rule-making will consider expanding the universe of CAFOs and require more stringent permit standards to control nutrients.²²⁰ In considering these changes, the EPA acknowledged that these provisions will not be limited only to Bay state producers. The EPA's schedule is to propose the new rules in 2010 and take final action in 2013.²²¹

On May 28, 2010, the EPA's Office of Waste Water Management published its “Implementation Guidance on CAFO Regulations - CAFOs that Discharge or Are Proposing to Discharge.”²²² This guidance was intended to clarify some regulatory requirements and present the EPA's strongly preferred approach to assure effective implementation of legal requirements without changing these legal requirements themselves.²²³ Furthermore, the EPA gave states discretion to adopt approaches on a case-by-case basis that differed from the recommendations found in the guidance document.²²⁴

XII. Conclusions

Politics have played a key role in determining CWA coverage of agricultural operations. When Congress passed the initial legislation with seemingly clear objectives, administrative agencies perceived the issues narrowly. As courts reviewed agency action in terms of statutory language, their decisions rested on interpretations of congressional intent. As agencies responded to court decisions, their proposed rules often reflected a tension between stakeholders in these issues. Both sides appear resistant to re-opening a full Congressional review of whether CWA is achieving its original goals, or whether other goals should be added to increase CWA effectiveness (such as making prevention of pollution a clearly stated objective of the CWA, which would justify federal jurisdiction under it). Politics may be losing its role as a means to achieve compromise.

***99** When CWA was passed, what did Congress intend the Act to cover in regard to agriculture and livestock production activities in particular? The answer lies in the language of CWA dealing with “point sources” and “discharge of a pollutant.” Arguably, the livestock production industry of the 1970s was not the main problem to address. As time has passed and some success has been achieved in managing discharges from industrial and commercial sites, attention has gradually shifted to other problems. As the Costle case indicates, the political conflict over whether to include or exclude agricultural producers from CWA regulation and questions of the agency's ability to address the regulatory burdens it

has been given were alive in the early days of the CWA and continue to this day. Choices, however, were made regarding the problems to be addressed and problems to be put aside for future attention.

Is current CWA regulation of livestock production facilities fulfilling Congressional intent, or is it an effort by interest groups to expand federal authority into areas never intended to be addressed? Had the scale of livestock production facilities remained unchanged over the past 30 years the answer to that question would be easier than it is today. The regulatory structure has always been there, but the regulated community has changed by moving in the direction of making regulation an easier conclusion to reach. The solution has not been looking for a problem which did not exist at the outset, but which, through evolution at the industry level, has grown to become subject to regulation. As livestock farms in this region have increased in size and scale, so has the concern over the environmental impact of these farms. In this regard the problem of water quality pollution evolved to the point where size and scale adopted for economic reasons fell under the terms of existing regulation. This unintended consequence is one worth noting, for no political repercussions flow from it. One could argue that the industry made decisions based on its understanding of how regulations could be applied to its activities; the fact that its conclusions were incorrect should not provide a basis for relief any more than inconvenience or reasonable cost should provide relief from regulatory burdens.

Cases involving the environmental impact of normal farming practices, including field application of manure, must be decided on sound, proven, scientific, and agronomic facts, not on emotion or unproven inferences. Courts must allow CWA to operate as Congress intended. Congress has made clear its intent that CAFOs are the only agricultural operations subject to EPA regulation as a point source, and that nonpoint sources are to be regulated by the states under section 208 and section 319. If this strategy does not accomplish the stated goals of the CWA, then it is up to Congress, not the courts, to amend its provisions to achieve the desired results.

***100** The Waterkeeper decision can be explained as a narrow interpretation of CWA, one which does not allow room to read “prevention of pollution” into CWA provisions that trigger coverage. The Agency's response to the Southview decision indicates that it recognized that loose language in CWA contributed to the opportunity to interpret a way out of its coverage. With the introduction of changes in 2001, the EPA attempted to tighten standards and eliminate the ambiguity. As Waterkeeper shows, however, some outcomes are just not as simple and easy to reach as some would expect them to be. Whether the farm plaintiffs in the case expected their argument (that a duty to apply for an NPDES permit did not apply in the absence of discharge) to succeed, the court's firm decision relying on the statutory language is an outcome of far-reaching implications. Similar narrow analysis of statutory language has been seen in later cases such as *Solid Waste Authority of Northern Cook County v. U.S. Army Corps of Engineers*²²⁵ and *Rapanos v. U.S. Army Corps of Engineers*²²⁶ that found ways to narrow rather than expand the reach of federal jurisdiction and the CWA in particular. Is the age of regulatory expansion in environmental matters over? Cases that challenge agency action will continue to be brought and if courts reach conclusions that narrow federal authority to regulate environmental problems, the problems will once again be thrust into the lap of the states where the political forces on either side may be especially strong.

Does this imply that some parts of the CWA regulatory objectives should be addressed at the state rather than federal level? Legislative efforts such as the Clean Water Restoration Act²²⁷ are viewed as efforts to right a perceived wrong, but it is also clear that courts are less likely to expand jurisdiction to accomplish that objective if there is an insufficient basis on which federal jurisdiction may rest. Establishing a clear statement of Congressional intent to overturn cases is a time honored process, but such action must still be measured against constitutional standards. Congressional statements that a regulated activity has an interstate connection sufficient to justify jurisdiction may not be enough to fulfill constitutional requirements on review.

Litigation throughout the years has played a significant role in shaping the application of CWA to CAFOs. President Obama's strategy of using an Executive Order to achieve his desired result will be challenged whenever the possible

implication of action taken under it is viewed as an attempt to modify the statutory language without Congressional action. The political problems associated with attempting to amend CWA are ***101** formidable, but relying on regulatory discretion to make amendments premised on the intention to carry out the purpose of the law may find that a narrow reading will not support such action. The Waterkeeper decision was an important reminder that good intentions alone may not be enough to impose new requirements when legislative language does not support it.

President Obama's decision to use an Executive Order as the vehicle to address an urgent problem must consider a variety of issues before placing much faith in that solution. One issue to consider is that like an agency, the Executive cannot expand any regulatory requirement beyond what the law currently provides. While reasonable minds may differ on the interpretation of statutory language, here can be no opportunity to expand legislative coverage without engaging Congress in the process. The political difficulties of engaging that process to solve problems are clear.

A second issue to consider is the practical problem of thrusting additional regulatory responsibility on administrative agencies already facing a known list of responsibilities. Since passage of CWA, progress has been made, but the rate of progress has slowed in a fiscal situation where the cost of government is weighing heavily on the national debt and calls to curb the growth of government continue to be heard across the country and the world. The era of "big government" may be drawing to a close. Does that leave issues such as environmental regulation of CAFOs at the doorstep of those state governments that have significant livestock production facilities in their states? Will state level regulation be more efficient in designing, implementing, and enforcing regulatory measures designed to protect the environment? In President Obama's Executive Order, he directed federal agencies to assess state programs and assist them in improving their effectiveness. That may be the most effective strategy that the Executive Order can deliver.

Finally, what has been learned from and about the 35 plus years of federal CWA regulation of CAFOs? Whatever regulatory approach is taken, efforts will be made to limit it through interpretation of key language and regulatory standards. These challenges require preparation. One cannot presume that some aspects of the law are so fundamental that the law must have included them. Reliance must be placed on express rather than implied language for identification of operative terms and provisions. Given what the law and regulations already provide for the regulation of CAFOs, President Obama's efforts will not be able to launch any new initiatives if they can arguably be viewed as extending beyond the language of CWA. If federal enforcement is weakened by administrative infeasibility, then assisting the states in the application and enforcement of current standards may be the best achievable outcome.

Footnotes

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¹ Federal Water Pollution Prevention and Control Act, 33 U.S.C. §§ 1251-1387 (1997), amended by 33 U.S.C. §§ 1251-1387 (2002).

² 33 U.S.C. § 1251(a) (1997).

³ 33 U.S.C. § 1362(12) (2008) ("The term 'discharge of a pollutant' and the term 'discharge of pollutants' each means (A) any addition of any pollutant to navigable waters from any point source, (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.").

⁴ 33 U.S.C. § 1362(14) (2008).

⁵ 33 U.S.C. § 1288(b)(2)(F) (1987).

- 6 Criteria for Determining a Concentrated Animal Feeding Operation, 40 C.F.R. § 122, app. B (2002) (reserved 2003).
- 7 See Jeff L. Todd, Environmental Law: The Clean Water - Understanding When a Concentrated Animal Feeding Operation Should Obtain an NPDES Permit, 49 Okla. L. Rev. 481, 487-88 (1996).
- 8 Id.
- 9 Id.
- 10 Concerned Area Residents for the Env't v. Southview Farms, 34 F.3d 114, 115-16 (2d Cir. 1994).
- 11 See id. at 121-23.
- 12 Drew L. Kershen, Agricultural Water Pollution: From Point to Nonpoint and Beyond, 9 Nat. Resources & Env't 3, 4 (Winter 1995); see also 33 U.S.C. § 1288 (1977).
- 13 Kershen, *supra* note 13, at 4; 33 U.S.C. § 1329 (1987), amended by 33 U.S.C. § 1329 (1998).
- 14 Id.
- 15 Id. (emphasis added); see 33 U.S.C. § 1251 (a)(7).
- 16 Id.
- 17 See id.
- 18 Id.
- 19 See Exec. Order No. 13,508, 72 Fed Reg. 23,099 (May 12, 2009).
- 20 U.S. Dept. of Agric., Pa. Agric. Stat., 132 (2009) available at http://www.nass.usda.gov/Statistics_by_State/Pennsylvania/Publications/Annual_Statistical_Bulletin/2008_2009/index.asp (last visited Oct. 18, 2010).
- 21 Id.
- 22 Id.
- 23 See Rich Allen and Ginger Harris, What We Know about the Demographics of U.S. Farm Operators, U.S. Dept. of Agric. (Feb. 25, 2005) (transcript available at <http://www.agcensus.usda.gov/Publications>; U.S. Dept. of Agric., American Farms, Chapter 3 in Agriculture Fact Book, available at <http://www.usda.gov/factbook/chapter3.pdf> (reporting that 92% of U.S. farms are small farms).
- 24 U.S. Dept. of Agric., Small Farms in the United States: Persistence Under Pressure 27-28, <http://www.ers.usda.gov/publications/eib63/eib63.pdf> (last visited Mar. 6, 2011); see also Farm Income, <http://www.infoplease.com/ipa/A0104738.html> (last visited Mar. 6, 2011).
- 25 Id.
- 26 See Rich Allen and Ginger Harris, U.S. Dept. of Agric., What We Know about the Demographics of U.S. Farm Operators, (Feb. 25, 2005) (transcript available at http://www.agcensus.usda.gov/Publication/2002/Other_Analysis/) (comparing the number, type and ages of current farm operators to assess “what it will mean for farm structure and farm succession).
- 27 U.S. Gov't Acct. Office, GAO 08-944, EPA Needs More Information and a Clearly Defined Strategy to Protect Air and Water Quality from Pollutants of Concern 41 (2008) (states that no federal agency collects accurate and consistent data on the number, size and location of CAFO's nationwide and, therefore, USDA collected data on large farms can be used a proxy for estimating trends in CAFO's nationwide. For the USDA meaning of a large dairy farm, see <http://www.ers.usda.gov/AmberWaves/September07/Features/DairyFarm>).

- 28 U.S. Dept. of Agric., Milk Cow Operations, [http:// www.nass.usda.gov/Charts_and_Maps/Milk_Production_and_Milk_Cows/cowoper.asp](http://www.nass.usda.gov/Charts_and_Maps/Milk_Production_and_Milk_Cows/cowoper.asp) (last visited Oct. 18, 2010).
- 29 U.S. Dept. of Agric., Milk Production, [http:// www.nass.usda.gov/Charts_and_Maps/Milk_Production_and_Milk_Cows/milkprod.asp](http://www.nass.usda.gov/Charts_and_Maps/Milk_Production_and_Milk_Cows/milkprod.asp) (last visited Oct. 18, 2010).
- 30 See A Top 10 List On Preparing for Fall Manure Application, [http:// www.manuremanager.com/content/view/2560/61/](http://www.manuremanager.com/content/view/2560/61/) (last visited Mar. 6, 2011).
- 31 See 33 U.S.C. § 1362(14) (2010) (includes concentrated animal feeding operations).
- 32 40 C.F.R. § 122.1 (2007).
- 33 40 C.F.R. § 122.23(b)(1) (2010).
- 34 U.S. Env'tl. Prot. Agency, Guidance Manual on NPDES Regulations for Concentrated Animal Feeding Operations (CAFO Guidance Manual) 4 (1995) [hereinafter NPDES Regulations]; See 40 C.F.R. § 122.23(b)(1)(i) (2010).
- 35 See 40 C.F.R. § 122.23(b)(2) ().
- 36 40 C.F.R. § 122, app. B (1997) (“The term animal unit means a unit of measurement for any animal feeding operation calculate by adding the following numbers: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 25 kilograms (approximately 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 1.1, plus the number of horses multiplied by 2.0.”).
- 37 40 C.F.R. § 122, app. B(a) (1997).
- 38 Id.
- 39 See 40 C.F.R. § 122.23(b)(2), (b)(4)(i),(b)(4)(iii) (2007).
- 40 40 C.F.R. § 122, app. B(b) (1997).
- 41 40 C.F.R. § 122.23(c)(1) (2007).
- 42 40 C.F.R. § 122.23(c)(3)(i)-(ii) (2007).
- 43 40 C.F.R. § 122.23(c)(2)(i)-(v).
- 44 Pratt, Fraey, & Carr, A Comparison of US and UK Law Regarding Pollution from Agricultural Runoff, 45 Drake L. Rev. 159, 169 (1997) (defining “25-year, 24-hour storm event” as “a statistically calculated maximum 24-hour rainfall with probable recurrence one every 25 years.”); See 40 C.F.R. § 122, app. (B) (2008) (The term[] 25 year, 24 hour rainfall event shall mean a rainfall event with a probable recurrence interval of once in .twenty-five years.as defined by the National Weather service in Technical Paper Number 40, Rainfall Frequently Atlas of the United States,or equivalent regional or state rainfall probability information developed there from.).
- 45 Pratt, Fraey, & Carr, *supra* note 45 at 169.
- 46 Id.
- 47 Id.
- 48 Kershen, *supra* note 13, at 4.
- 49 Id.
- 50 33 U.S.C. § 1288(b)(2)(F) (1987).
- 51 Natural Res. Def. Council, Inc. v. Costle, 568 F.2d 1369 (D.C. Cir. 1977).

52 Id.
53 Id. at 1372.
54 Id. at 1372-73.
55 Id. at 1373.
56 Id.
57 Costle, 568 F.2d at 1373.
58 Id.
59 Id.
60 Id. at 1374.
61 Id.
62 Id. at 1377.
63 Costle, 568 F.2d at 1374.
64 Id.
65 Id. at 1375.
66 Id. at 1382.
67 Natural Res. Def. Council, Inc. v. Train, 510 F.2d 692 (D.C. Cir. 1975).
68 Id. at 710-11.
69 Id. at 712.
70 See Id.
71 Id.
72 Id.
73 Kershen, *supra* note 13, at 4; 33 U.S.C § 1362(14) (1977).
74 Kershen, *supra* note 13, at 4; 33 U.S.C. s 1362(14) (2008).
75 Kershen, *supra* note 13, at 4.
76 See *id.* at 3.
77 See Todd, *supra* note 8, at 483.
78 33 U.S.C. § 1288 (2008).
79 33 U.S.C. § 1288(b)(2)(F) (1987).
80 See Kershen, *supra* note 13, at 4.
81 Id.

- 82 See Ind. Dept. of Env'tl. Mgmt., Clean Water Act Section 319 Agricultural Cost-Share Guidance for Indiana (2007), <http://in.gov/idem/agcostshareguide.pdf>.
- 83 Concerned Area Residents for the Env't v. Southview Farm, 34 F.3d 114 (2d Cir. 1994), cert. denied 514 U.S. 1082 (1995).
- 84 Id. at 115.
- 85 Id.
- 86 See Id. at 116.
- 87 Id.
- 88 Id.
- 89 Southview Farm, 34 F.3d at 116.
- 90 Id.
- 91 Id.
- 92 Id. at 117.
- 93 Id. at 115.
- 94 See Frarey, *supra* note 45, at 172.
- 95 Southview Farm, 34 F.3d at 121.
- 96 See id. at 118.
- 97 Id. at 116.
- 98 Id. at 115.
- 99 Concerned Area Residents for the Env't v. Southview Farm (C.A.R.E.), 834 F. Supp. 1422, 1435 (W.D.N.Y. 1993).
- 100 Id. at 1425.
- 101 Id. at 1426.
- 102 Id. at 1433.
- 103 Id. at 1429 n.6.
- 104 Id. at 1434.
- 105 Southview Farm, 34 F.3d at 123 (2d Cir. 1994).
- 106 Id. at 115.
- 107 Id. at 123.
- 108 Id.
- 109 NPDES Regulations, *supra* note 35, at 4.
- 110 Southview, 34 F.3d at 123.
- 111 NPDES Regulations, *supra* note 35, at 4.

- 112 40 C.F.R. § 122.3(e) (2010).
- 113 Southview Farm, 34 F.3d at 123.
- 114 40 C.F.R. 122.23 (c)(1); see also discussion of the CAFO, *supra* Part. III.
- 115 Southview Farm, 34 F.3d at 118.
- 116 *Id.* at 119; see also 33 U.S.C. 1362(14).
- 117 See Southview Farm, 34 F.3d at 118.
- 118 *Id.* at 118.
- 119 *Id.*
- 120 See U.S. Env'tl. Prot. Agency, Soil Preparation, [http:// www.epa.gov/oecaagct/ag101/cropsoil.html](http://www.epa.gov/oecaagct/ag101/cropsoil.html) (last visited Mar. 6, 2011).
- 121 Southview Farm (C.A.R.E.), 834 F. Supp. at 1425.
- 122 *Id.*
- 123 *Id.* at 1425-26 (quoting *Mattivi v. South African Marine Corp.*, 618 F.2d 163, 167 (2d Cir. 1980)).
- 124 Southview Farm, 34 F.3d at 120.
- 125 See Todd, *supra* note 8, at 498.
- 126 Southview Farm (C.A.R.E.), 834 F.Supp. at 1426.
- 127 *Id.* at 1426.
- 128 *Id.* at 1430.
- 129 Southview Farm, 34 F.3d at 120.
- 130 *Id.* at 120-21.
- 131 *Id.* at 121.
- 132 See Midwest Plan Service, Iowa State Univ., *Livestock Waste Facilities Handbook*, 9.2 (1985) [hereinafter *Livestock Waste*].
- 133 *Id.* at 9.2 tbl. 9-1.
- 134 *Id.*
- 135 33 U.S.C. § 1288(b)(2)(F); see *supra* discussion in Section III.
- 136 33 U.S.C. § 1288(a)(2) (1997).
- 137 Southview Farm (C.A.R.E.), 834 F.Supp. at 1426.
- 138 *Id.* at 1426.
- 139 *Id.*
- 140 See *id.*
- 141 See Southview Farm, 34 F.3d at 121; see also Southview Farm (C.A.R.E.), 834 F.Supp at 1426 (In the District Court, the court noted that the Department of Environmental Conservation evidence presented established that the runoff was caused by rainfall, but at the Second Circuit, the court examined whether the jury had a reasonable basis on which to conclude that

the violations were the result of the rainfall. Thus, a causation link was established in order for the storm water exception to apply.).

142 Southview Farm (C.A.R.E.), 834 F. Supp. at 1434.

143 Id.

144 Southview Farm, 34 F.3d at 119.

145 See Todd, *supra* note 8, at 507.

146 Id.

147 Id. at 508 n. 207.

148 EPA Executive Summary and Unified National AFO Strategy 1 (1999), http://cfpub1.epa.gov/npdes/docs.cfm?program_id=0&view=allnpdes&sort=name&amount=all (last visited Oct. 17, 2010) [hereinafter EPA Exec. Summary].

149 Id. at 2.

150 Id. at 1.

151 Id.

152 Id.

153 Id.

154 EPA Exec. Summary, *supra* note 149, at 1.

155 Id.

156 See U.S. Env'tl. Prot. Agency, EPA Press Release - Feb. 19, 1998, <http://www.epa.gov/history/topics/cwa/03.htm> (last visited Mar. 6, 2011) (in announcing this strategy, having the objective of issuing discharge permits [NPDES permits] to the largest operations by 2005, implies that these operations did not have permits in 1999. In other words, the CWA regulation of CAFO was ineffective at this time).

157 EPA Exec. Summary, *supra* note 149, at 2, 3. Each Comprehensive Nutrient Management plan is to have six components that establish clearly defined goals for the agricultural operation. These goals include feed management, manure handling and storage, land application of manure, land management, record keeping, and other manure utilization options.

158 See *id.* at 3.

159 Id. at 4.

160 Id.

161 See *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486, 494 (2d Cir. 2005).

162 See National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs); Final Rule, 68 Fed. Reg. 7175-274 (Feb. 12, 2003) (codified at 40 C.F.R. Part. 9, 122, 123, 412).

163 68 Fed. Reg. 7176.

164 68 Fed. Reg. 7176.

165 68 Fed. Reg. 7176.

166 68 Fed. Reg. 7176.

- 167 68 Fed. Reg. 7176.
- 168 68 Fed. Reg. 7179.
- 169 68 Fed. Reg. 7179.
- 170 68 Fed. Reg. 7179.
- 171 National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs); Final Rule, 68 Fed. Reg. 7179-80 (Feb. 12, 2003) (codified at 40 C.F.R. pt. 9, 122, 123, 412).
- 172 68 Fed. Reg. 7180.
- 173 68 Fed. Reg. 7182.
- 174 68 Fed. Reg. 7181.
- 175 68 Fed. Reg. 7182.
- 176 68 Fed. Reg. 7182.
- 177 68 Fed. Reg. 7182.
- 178 National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs); Final Rule, 68 Fed. Reg. 7182 (Feb. 12, 2003) (codified at 40 C.F.R. pt. 9, 122, 123, 412).
- 179 *Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486 (2d Cir. 2005); see John C. Becker, *Waterkeeper Alliance v. EPA: Why it is Important*, 36 *Envtl.Law Reporter* 10566 (2006) (For a more detailed discussion of this case).
- 180 *Waterkeeper Alliance*, 399 F.3d at 497.
- 181 See *id.*
- 182 *Id.*
- 183 *Id.* at 498.
- 184 *Id.*
- 185 *Id.* at 504-05.
- 186 *Waterkeeper Alliance*, 399 F.3d at 504-05.
- 187 See *id.* at 498-99.
- 188 *Id.* at 505.
- 189 *Id.* at 504.
- 190 *Id.* at 506-07.
- 191 *Id.* at 507.
- 192 *Waterkeeper Alliance*, 399 F.3d at 507.
- 193 *Id.*
- 194 *Id.* at 510.

- 195 Id. at 511.
- 196 Revised Nat'l Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines for Concentrated Animal Feeding Operations in Response to Waterkeeper Decision; Proposed Rule, 71 Fed. Reg. 37,743-87 (June 30, 2006) (codified at 40 C.F.R. pt. 122, 412).
- 197 71 Fed. Reg. 37,748.
- 198 71 Fed. Reg. 37,748-49.
- 199 Revised Nat'l Pollutant Discharge Elimination System Permit Regulations for Concentrated Animal Feeding Operations; Supplemental Notice of Proposed Rulemaking, 73 Fed. Reg. 12,321-40 (March 7, 2008) (to be codified at 40 C.F.R. 122).
- 200 73 Fed. Reg. 12,324 (These criteria are: 1) An objective evaluation of the production area design, construction, operation and maintenance which shows that the production area will not discharge, and 2) development, maintenance and implementation on site of a Nutrient Management Plan that satisfies the elements set forth in 40 CFR 122.42 (e) (1) and 412.37(c)).
- 201 73 Fed. Reg. 12,324.
- 202 73 Fed. Reg. 12,324.
- 203 73 Fed. Reg. 12,324.
- 204 73 Fed. Reg. 12,324.
- 205 See EPA Office of Waste Water Management, Implementation Guidance on CAFO Regulations - CAFOs That Discharge or Are Proposing to Discharge (2010) [hereinafter EPA Office of Waste Water Management].
- 206 Exec. Order No. 13,508, 74 Fed. Reg. 23,099 (May 12, 2009).
- 207 74 Fed. Reg. 23,099.
- 208 74 Fed. Reg. 23,099.
- 209 74 Fed. Reg. 23,099.
- 210 See U.S. Env'tl. Prot. Agency, The Next Generation of Tools and Actions to Restore Water Quality in the Chesapeake Bay, A Revised Report Fulfilling Section 202a of the Executive Order 13508 (2009)[hereinafter Revised Report].
- 211 Id. at 10.
- 212 Id. at 27.
- 213 Id.
- 214 Id.
- 215 Id.
- 216 Revised Report, *supra* note 211, at 28.
- 217 Revised Report, *supra* note 211.
- 218 U.S. EPA to Initiate Rulemaking on Stormwater, CAFOs to Reduce Water Pollution, Backstop States in Chesapeake Bay Watershed, EPA.GOV (Jan. 11, 2010), <http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/bf0a768c94bbec6f852576aa00609ac1!OpenDocument>.
- 219 Id.
- 220 Id.

- 221 Id.
- 222 EPA Office of Waste Water Management, *supra* note 206.
- 223 Id. at 2.
- 224 Id. at 1.
- 225 Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng'rs, 531 U.S. 159, 159 (2001).
- 226 Rapanos v. U.S., 547 U.S. 715, 732 (2006).
- 227 Clean Water Restoration Act, S. 787, 111th Cong. (2009).

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